A scientometric review of pro-poor tourism research: Visualization and analysis

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ABSTRACT

The development of poverty-stricken areas presents a critical challenge to achieving social sustainability. The emergence of pro-poor tourism provides a promising option for poverty alleviation and is attracting increasing attention. Previous studies have attempted to explore the effectiveness and patterns of pro-poor tourism. Currently, a quantitative and systematic review of pro-poor tourism (PPT) research seems to be missing. Thus, a scientometric approach is employed to build a knowledge map, with the aim of using bibliometric data to provide an objective and holistic perspective on PPT. Through the co-occurrence, cluster, and co-citation analyses of 164 related papers published from 2002 to 2018, six major themes (i.e., development, tourism management, sustainable tourism, protected areas, poverty, and slum tourism) are selected to showcase the current status of PPT research. Through the lens of a capabilities-based resource perspective, a three-dimensional PPT framework (including focus, emphasis, and motivation) is developed to structure future research.

1. Introduction

The convergence of rapid tourism growth in poverty-stricken countries has triggered a large wave of interest in tourism as a sustainable development strategy to meet pro-poor objectives (Chok, Macbeth, & Warren, 2007). In the late 1990s, the U.K. Department for International Development (DFID) proposed the concept of pro-poor tourism (PPT) and suggested that the PPT strategy should be directed towards generating net benefits for the poor (DFID, 1999; Goodwin, Brown, & Hall, 2008). The stakeholders involved in PPT demonstrate varied backgrounds and value positions. The link between tourism and the reduction of poverty has been a divisive issue (Njoya & Seetaram, 2018). There is also continued debate over the effectiveness of tourism on poverty alleviation. In sub-Saharan Africa, tourism is expected to post average gains of 4.7% and to create 6.6% of the total regional employment in the past decade (The Free Library, 2014). Many studies have developed theoretical models to show the positive effects of tourism (Gascón, 2015; Manwa & Manwa, 2014; Yang, Kam, Liu, Xie, & Zhao, 2014). For example, poor households increase income via direct or indirect participation in tourism. Tourism also helps expand the tax base of the local and/or national government; the increased revenue

could be used for providing or improving the social, cultural, and natural environment of the poor. Generally, tourism may yield favorable short-term and medium-term outcomes for the poor through two channels, namely income and tax (Blake, Arbache, Sinclair, & Teles, 2008). Nevertheless, that is far from the case. Ashley and Mitchell (2009) revealed that a number of African countries actually do not promote tourism in an effective way or fail to make the link between tourism and poverty alleviation or both. An increasing number of studies have realized that the expansion of the tourism sectors can be immiserating (Sahli & Nowak, 2007). These studies assume that a boom in the tourism business will have a negative effect on poorer households when it leads to the appreciation of the local currency—otherwise known as the Dutch disease effect (Hazari & Nowak, 2003).

Apart from the effectiveness of PPT, the tourism patterns have also caused wide concern during the past two decades. These patterns have different foci, but similar objectives. All of the tourism patterns that have the potential for poverty alleviation are included in the PPT area in a broad sense.[1] Prior studies have recognized the efficacy of the resource-based view (Duarte Alonso, Kok, & O'Brien, 2018; Hallin & Marnburg, 2008) in tourism management studies. The rapid development of tourism depends, to a large extent, on exploring local resources

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[1] Note: Some of the tourism patterns (e.g., eco-tourism and sustainable tourism) not only have the potential to benefit the poor, but also contribute to other aspects (e.g., environmental protection). In order to provide a comprehensive view of the PPT-related research, the current study includes all potential tourism patterns.
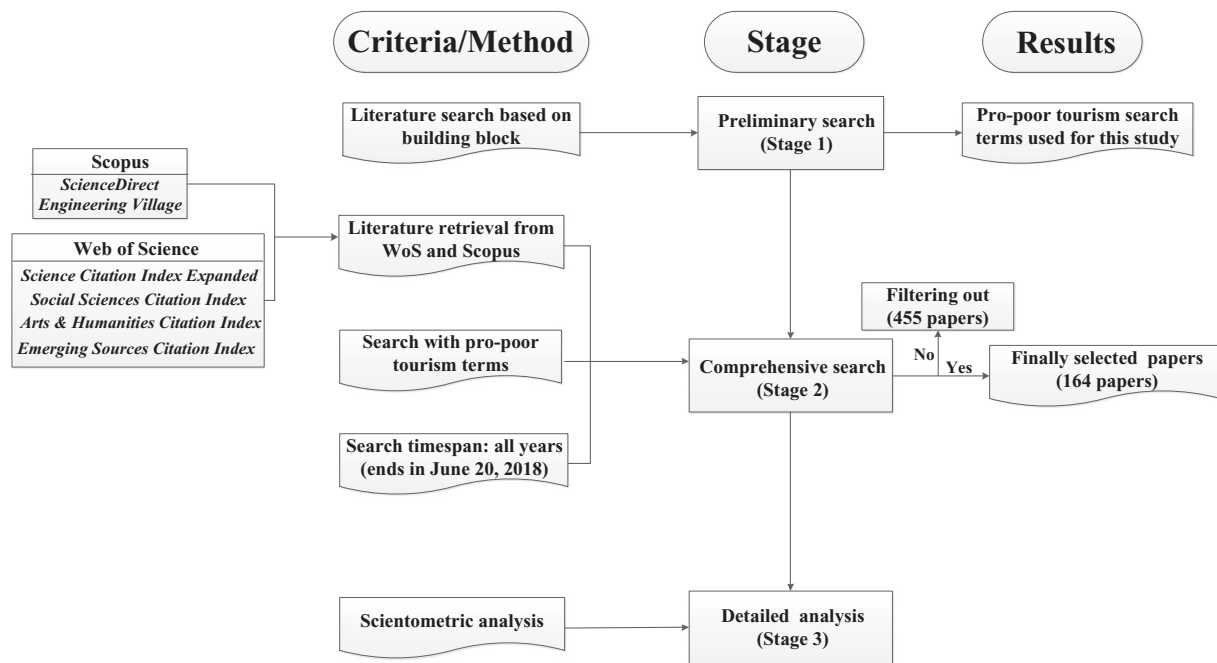
Fig. 1. The research design of this study.
(Source: Adapted from Mok, Shen, and Yang (2015) and He et al. (2017))

such as landscape, local culture and heritage, people, and social capital (Denicolai, Cioccarelli, & Zucchella, 2010; Schianetz, Kavanagh, & Lockington, 2007). Different strains of PPT draw upon diverse resources to achieve poverty reduction. As a kind of tangible resource, landscape relies on natural endowment and geographical advantages. By contrast, intangible resources are usually based on social factors and humanistic concern. Local culture and heritage are usually considered a miniature of society. Different types of resources lead to various patterns of PPT; some are mainly driven by intangible resources, such as ethnic tourism (Phommavong & Sörensson, 2014), tribal tourism (Pratt, Gibson, & Movono, 2013), and heritage tourism (Poria, Butler, & Airey, 2003). Meanwhile, many PPT patterns largely hinge on tangible resources, such as township tourism (Booyens, 2010; Sloan, Simons-Kaufmann, Legrand, & Perlick, 2015), agriculture tourism (Pillay & Rogerson, 2013), and coastal route tourism (Myles, 2014). Furthermore, increasing numbers of PPT patterns emphasize the integration of multiple resources and objectives, such as sustainable tourism (Jamal, Camargo, & Wilson, 2013) and inclusive tourism (Scheyvens & Biddulph, 2018).

Thus far, nearly 200 articles related to PPT have been published, making it an increasingly important research area (Scheyvens, 2007). Nevertheless, a systematic and comprehensive analysis of this research area seems to be missing in tourism study (Handaru, 2018; Harrison, 2008; Mitchell & Ashley, 2010; Scheyvens, 2011), despite the importance of providing a critical review of the existing PPT studies. Therefore, this paper conducts a scientometric analysis of PPT articles published between 2002 and 2018. In contrast to prior studies that focus on a specific aspect of PPT, this paper enables bibliographic data to provide a highly accurate perspective on this field as a whole (Qian, Shen, & Law, 2018). The findings can identify potential research issues and provide practical implications for PPT, thereby spurring encouragement for future studies and sustainable practices.

The objectives of this paper are as follows: (1) to summarize PPT studies from 2002 to 2018, (2) to capture the research status for PPT from the perspective of a keyword co-occurrence network and to identify the research structures through cluster analysis, (3) to analyze the evolution of PPT research communities through co-citation analysis, and (4) to develop an integrated PPT framework that presents a future research roadmap. The rest of this paper is structured as follows.

Section 2 illustrates the research method employed in this study. Section 3 presents the results of the co-occurrence analysis, followed by Section 4, which describes the results and findings from the cluster analysis. Section 5 shows the top 15 cited articles, authors, and journals based on the co-citation analysis. Finally, Section 6 develops a PPT conceptual framework and discusses the future research opportunities of PPT.

2. Research method

2.1. Paper retrieval

This study identified academic journals with PPT publications from two databases, namely Scopus and the Web of Science (WoS) Core Collection database. WoS is the world's leading citation database, covering over 12,000 high-impact journals (Clarivate Analytics, 2017). The Social Sciences Citation Index (SSCI), Science Citation Index Expanded (SCIE), Arts & Humanities Citation Index, and Emerging Sources Citation Index (ESCI) are all derived from the WoS Core Collection database. Scopus is the world's largest abstract and citation database, with multidisciplinary information from over 21,500 peer-reviewed journals (Elsevier, 2018). Scopus covers a series of databases, such as ScienceDirect and Engineering Village. In fact, most important journal papers in the realm of tourism management come from the WoS Core Collection database. Fang, Yin, and Wu (2018) conducted a scientometric analysis on climate change and tourism using data collected from the WoS. Okumus, Koseoglu, and Ma (2018) analyzed the food and gastronomy research in tourism and hospitality using data collected from 16 SSCI-indexed journals. Liu, Liu, Wang, and Pan (2018) presented hot topics and emerging trends in tourism forecasting research using data retrieved from the WoS. Thus, the combination of sources from the WoS Core Collection database and Scopus can be considered sufficient to showcase the patterns and trends of PPT research. Fig. 1 shows the research design of this study.

Two search criteria were established for paper retrieval. Firstly, only papers from peer-reviewed English journals were selected for subsequent reviews (Mok et al., 2015). Scopus also includes papers in other languages (e.g., Spanish, French, and Chinese) in the realm of tourism

management. In the search process, peer-reviewed papers outside English journals were excluded. The retained peer-reviewed English literature usually has a high rank on impact scores (e.g., SCImago Journal Rank and H-index) in the world's tourism research community. Secondly, conference papers and editorials, as well as book reviews, were excluded; hence, all retrieved papers could be analyzed by an identical construct (e.g., research aims and methods) (He et al., 2017).

The building block is one of the most widely used methods for conducting a literature search (Zhou & Mi, 2017). This method suggests that researchers divide a topic into constituting elements, identify potential terms for each element, and combine terms for each element with Boolean functions (e.g., AND, OR). Thus, the search rule in this study was ("pro-poor" OR "pro poor" OR "poverty" OR "slum") AND ("tourism" OR "travel" OR "tourist"). The current study selected these terms because they have similar meanings but appear in various research disciplines. WoS and Scopus provide a series of search fields, such as topic, title, author, editor, publication name, year published, and address. The current study identifies the targeted papers based on topic. The topic search includes the fields of title, abstract, and keywords. An abstract is a brief summary of a research article and consists of the author's core viewpoints. As long as the PPT-related terms appear in the title, abstract, or keywords of the paper, this record will be retrieved for further analysis. Although some of the papers don't use pro-poor tourism as their keyword, they are still selected because their abstracts contain the PPT-relevant contents. This method includes those types of tourism that are not captured within the terminology of PPT but involve poverty-relevant issues. To avoid the omission of targeted papers, the search timespan of the journal papers was set for "all years" (ended on June 20, 2018). A total of 619 papers were retrieved. After the filtering process was completed, 164 journal papers were selected for bibliometric analysis. The filtering criteria are shown in Table 1.

As shown in Table 2, 16 journals were selected via this process. These journals have published at least two papers that fit the search criterion and are highly ranked by tourism management researchers. It is notable that the first study on the "retrieved papers" list is Belshaw (2002), which analyzed the poverty-reduction strategies in Sub-Saharan Africa, such as tourism-based development, mineral-based development, and human capital formation. The subsequent analyzing process was, therefore, set from 2002 to 2018. Fig. 2 shows the distribution of the 164 bibliographic records between 2002 and 2018. In general, the annual number of records showed a tendency for ascension after 2005.

Table 2 identified the top 25 source journals for PPT research, according to the statistics from the WoS and Scopus databases. *The Journal of Sustainable Tourism* had published 13 articles (7.93%) on PPT research and topped the list, followed by *Current Issues in Tourism* (10 articles), *Development Southern Africa* (8 articles), and *Tourism Recreation Research* (8 articles).

2.2. Scientometric analysis

Because of a wide range of research topics related to PPT, it is nearly impossible to characterize the overall research field by means of manual literature analysis. The manual review, while insightful, may lead to a biased evaluation result of literature and is limited by subjective interpretation (Yalcinkaya & Singh, 2015). Thus, this study provides a systematic analysis of PPT research using the scientometric

Table 2
Distributions of the retrieved papers.

Journal name	Number of retrieved papers from WoS and Scopus
Journal of Sustainable Tourism	13
Current Issues in Tourism	10
Development Southern Africa	8
Tourism Recreation Research	8
Asia Pacific Journal of Tourism Research	7
Tourism Geographies	6
Tourism Planning and Development	5
Mediterranean Journal of Social Sciences	4
Sustainability	4
Tourism Management	4
Anatolia	3
Journal of Policy Research in Tourism Leisure and Events	3
Third World Quarterly	3
Tourism and Hospitality Research	3
Urban Forum	2
Annals of Tourism Research	2
International Journal of Social Ecology and Sustainable Development	2
International Journal of Tourism Research	2
Journal of Hospitality Marketing and Management	2
Journal of Travel Research	2
Tourism	2
Tourism Analysis	2
Tourism Management Perspectives	2
Local Economy	2
World Development	2
Others*	61

* Note: "Others" refer to those journals that have only a single occurrence in the 164 retrieved articles.

method—a knowledge domain visualization or mapping technique (Pollack & Adler, 2015). Visualizing the global PPT provides an opportunity to form a holistic view of the research trends and patterns in this field. The visualization process requires us to take advantage of specialized software. CiteSpace is one of the most popular pieces of software for visualizing and analyzing trends and patterns in scientific literature. In this study, CiteSpace software was employed for network exploration based on the keywords the authors used to describe their work.

Keywords are typically viewed as brief and clear descriptions of the research subjects. Thus, it is reasonable to use keywords as units of analysis to identify the subject structures of the PPT field. First, the co-occurrence network provides a spatial and temporal representation of the PPT field. Second, the cluster analysis showcases the research patterns of the PPT field in detail. Third, co-citation analysis, including co-cited authors, co-cited articles, and co-cited journals, was applied to detect and analyze the significant intellectual resources and underlying theoretical foundation that drive research evolution and trends. Different research themes associated with each principal area are identified, which paves the way for the establishment of the PPT conceptual framework.

Table 1
Filtering criteria for literature selection.

Criterion	Example
Criterion 1: The words in the search schema appear only in the keywords plus. The research abstracts actually have no relationship with tourism.	Salihu (2018) analyzed the influence of poverty and unemployment on Boko Haram terrorism. Tourism is not in the author's keywords list. It had been added by WoS to the keywords plus.
Criterion 2: The studies only refer to tourism and poverty issues, but mainly focus on other areas.	Child (2018) illustrated how to overcome poverty in fisheries and revealed the influences of collective actions on the tourism industry in North Carolina, USA.

Fig. 2. The annual number of papers related to PPT in WoS and Scopus.

3. The co-occurrence network

The selected 164 PPT papers were analyzed in terms of keywords. The overall network indicates the development trajectory of PPT over time and presents the most prominent footprints of this research field. Nodes in the network refer to individual keywords used to summarize the core subjects of each article. Edges that connect each node refer to co-occurrence links in which two different keywords appeared together in the same article. In the WoS and Scopus, there are two groups of keywords: author keywords, which are provided by the authors, and keywords plus, which are supplied by the databases. Both groups of keywords from the 164 records were used to build the keyword co-occurring network. CiteSpace has the functionality to merge the nodes that are variants of the same term. Therefore, similar keywords, such as "pro-poor tourism," "Pro-poor tourism," and "Pro-poor Tourism (PPT)," were merged into "pro-poor tourism."

3.1. An overall view of the keyword co-occurrence network

Fig. 3 shows the network of co-occurring keywords with 69 nodes and 165 links. The node size indicates the frequency at which a keyword occurred in the WoS and Scopus dataset. The top 10 high-frequency keywords were "pro-poor tourism" (frequency = 71), "tourism" (frequency = 23), "tourism development" (frequency = 22), "poverty alleviation" (frequency = 19), "Africa" (frequency = 16), "ecotourism" (frequency = 14), "South Africa" (frequency = 13), "poverty" (frequency = 12), and "development" (frequency = 8). Additionally, some keywords demonstrate high betweenness centrality, such as "ethics" (centrality = 0.21), "policy" (centrality = 0.17), "sustainable tourism" (centrality = 0.12), "sustainable development" (centrality = 0.10), "reduction" (centrality = 0.09), and "impact" (centrality = 0.08). These keywords connected various research topics and have a

Table 3
Keywords co-occurrence analysis of PPT research.

No.	Keywords	Frequency	Centrality
1	Pro-poor tourism	71	0.64
2	Tourism	23	0.19
3	Tourism development	22	0.27
4	Poverty alleviation	19	0.13
5	Africa	16	0.3
6	Ecotourism	14	0.26
7	South Africa	13	0.23
8	Poverty	12	0.07
9	Development	8	0.16
10	Impact	8	0.08
11	Sustainable development	7	0.1
12	Poverty reduction	7	0.04
13	Economic growth	5	0.03
14	Sustainable tourism	5	0.12
15	Saharan Africa	4	0
16	Community	4	0.03
17	Perspective	4	0.04
18	Policy	4	0.17
19	Management	4	0.01
20	Reduction	4	0.09
21	Perception	3	0.02
22	Developing world	3	0
23	Community based tourism	3	0
24	Sustainability	3	0
25	Protected area	3	0
26	Place	3	0
27	Livelihood	3	0.04

significant influence on the development of PPT research. Moreover, four keywords were found with the strongest citation bursts: "tourism development" (burst strength = 4.6978), "tourism" (burst strength = 6.7781), "Saharan African" (burst strength = 3.7489), and "management" (burst strength = 4.8417), thus indicating that these were the hot topics in PPT research over the past twenty years.

The details on the keywords are shown in Table 3.

3.2. A timeline view of keyword co-occurrence network

A keyword co-occurrence network presents a static status of a specific field, without considering the changes over time. CiteSpace provides a time zone view through which each keyword is arrayed chronologically to showcase the development trends within keywords. The evolution of PPT-related keywords continued from 2002 to 2018, as shown in Fig. 4. The colorful lines that connect the nodes are the co-occurrence links between keywords. The colors of these lines show when a connection was established for the first time. Color transition from a cool tone to a warm tone represents the timespan from past to present (He et al., 2017). Given the increasingly diversified connotation of PPT, keywords move away from "pro-poor tourism" to "community-based tourism" and "sustainable tourism." Increasing interest has also emerged regarding "livelihood," "policy," and "sustainability."

Fig. 3. Top keywords occurring more than twice.

Time axis: 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018
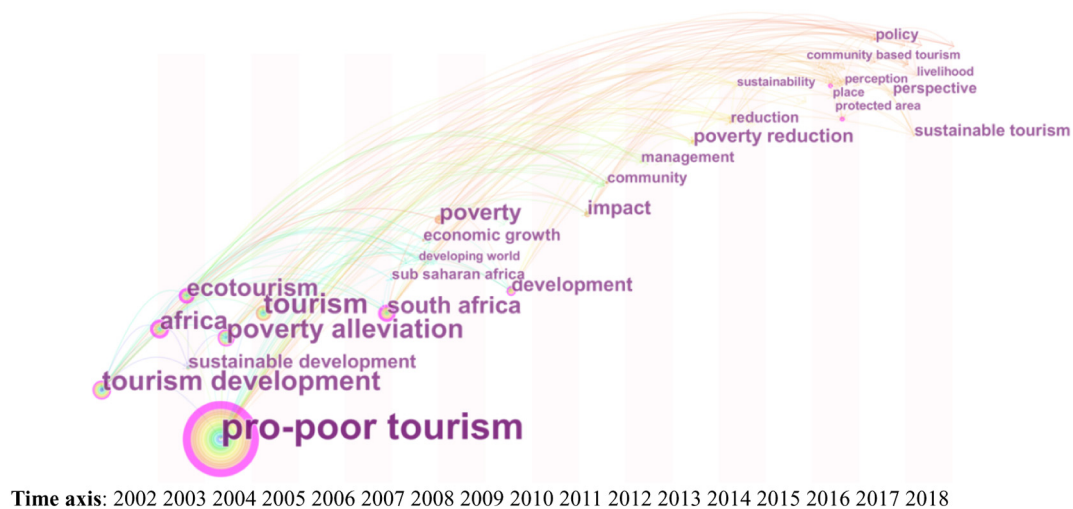
Fig. 4. A timeline view of the keyword co-occurrence network.

3.3. Development process of PPT research

In the current study, the timespan of PPT research considered is from 2002 to 2018 (as shown in Fig. 4). In order to better capture the development characteristics of PPT, this paper preliminarily divided the 17-year timespan into three periods, namely 2002–2007, 2008–2014, and 2015–2018. This division is based on the temporal distribution of PPT keywords. A series of keywords related to economic development and developing countries emerge before 2008, such as economic growth, development, political economy, tourism economics, South Africa, Southern Africa, West Africa, and Saharan Africa. Then, many keywords focusing on environmental impact and globalization occur after 2008. Finally, several keywords arose related to social sustainability after 2014, such as livelihood, inequality, income inequality, and community development. In the current study, the illustration of the development process of PPT research is in line with Scheyvens (2009). Major players in the tourism industry are mainly concerned with profit maximization (Ashley & Haysom, 2006; Zhao and Ritchie 2007). On this basis, Scheyvens (2009) noted that PPT is in danger of becoming a "window dressing." In other words, PPT might remain something of a fad, a new way to meet the interests of the market, not the poor, through which elites usually capture most of the benefits. Subsequently, an increasing number of studies devote attention to local sustainable development, including the conservation of resources and the equity of interest sharing. Meanwhile, Chok et al. (2007) also suggested a fundamental shift in ideology, from dependence on supposed altruism to a solid foundation of ethics in the realm of PPT. All of these studies support the current stage division of PPT research.

In the first stage, PPT research mainly focuses on poverty alleviation (as shown in Fig. 5). This is also the basic objective of PPT. Developing countries are the main audiences of PPT. Africa, especially South Africa and West Africa, received most of the research attention. The period from 2002 to 2007 is the primary stage of PPT research. During this period, the implementation objectives and areas of PPT are relatively monotonic. The concept of poverty only stays at the level of absolute poverty. More specifically, absolute poverty refers to the level of requirements necessary to afford minimal standards of food, clothing, health care, and shelter (Foster, 1998). At this stage, the implementation of PPT primarily aims to address the absolute poverty issues.

In the second stage, PPT research devotes increasing attention to eco-tourism and environmental impact, switching from emphasizing economic development to emphasizing both economically and environmentally sustainable growth (as shown in Fig. 6). In addition to African countries, East Asian and Pacific countries (e.g., China and Fiji) attract growing attention in the field of PPT. In other words, PPT

research shows a trend of increasing globalization. The imbalance of regional development had become one of the most prominent challenges worldwide. At this stage, the task of PPT is not only to eradicate absolute poverty, but also more importantly to promote the reduction of unbalanced development. Furthermore, unbalanced development between areas, cities, and countrysides leads to income inequality. Determining how to reduce relative poverty becomes the crucial role of PPT. From absolute poverty to relative poverty, the role of PPT becomes more diversified and flexible.

In the third stage, PPT research makes more efforts regarding sustainable tourism and development policy, especially the improvement of social livelihood and the natural environment (as shown in Fig. 7). The connotation of PPT is becoming much richer. In addition to economic and environmental impacts, an increasing body of PPT research is concerned about social dilemmas, such as gender and ethnic inequality (as distinct from the second stage). Moreover, the patterns and vehicles of PPT are more pluralistic and include approaches such as volunteer tourism, community-based tourism, and sustainable tourism, with a growing emphasis on inclusive and sustainable growth (Bakker & Messerli, 2017). Furthermore, the research perspectives of PPT are becoming more microcosmic. In addition to the country- or region-level research, community-, enterprise-, and household-level studies have gradually increased in popularity.

4. The cluster analysis

4.1. Summary of cluster analysis

The keyword co-occurrence network has shed light on the PPT field; however, it fails to clarify the structures of PPT studies. In the current study, cluster analysis is employed to identify the latent semantic themes within the bibliographic data. The objective of cluster analysis is to collect the context information, thereby deriving different clusters to represent the theme structure. To explore the characteristics of an identified cluster, CiteSpace can extract noun phrases automatically from titles, keywords lists, or abstract terms based on a series of algorithms, including latent semantic indexing (LSI), mutual information (MI), and log-likelihood ratio (LLR) (Synnestvedt, Chen, & Holmes, 2005). These algorithms can convert unstructured texts into structured data objects to identify research patterns for the discovery of knowledge (Delen and Crossland, 2008).

The clusters are numbered automatically in the descending order of the cluster size, starting from the largest cluster #0, the second largest #1, and so on (Chen, 2014). As shown in Table 4, PPT has six main research clusters, including development, tourism management,

Fig. 5. Keywords cloud of PPT research between 2002 and 2007.

sustainable tourism, protected areas, poverty, and slum tourism. Each theme is relatively independent of others but also partially overlapping. It is noteworthy that different words may express the same meaning, and one word may convey different meanings in different contexts. Accordingly, cluster analysis "loads" several words that convey the same meaning to their associated theme and also assigns one word to different latent semantics other than its main associated theme (He et al., 2017; Yalcinkaya & Singh, 2015). Therefore, most of the clusters are typically overlapping.

4.2. Detailed PPT research themes

As shown in Fig. 8, there are six research clusters in the PPT filed. The detailed description of each cluster is as follows. Cluster labels are extracted by CiteSpace from the keywords database automatically. Cluster names are interpreted by the authors based on the representative articles.

Cluster 1 is the largest research theme and is related to development. PPT is considered a tool for development in nature. As shown in Table 5, development conveys three layers of meaning in the PPT context, namely regional development, development patterns, and social development. More specifically, Adiyia and Vanneste (2018) explored the regional development potential of local linkages with the supply chain of tourism businesses in western Uganda. Bakker and Messerli (2017) revealed a shift from pro-poor thinking to inclusive growth efforts for tourism development. Brito (2018) proposed a conceptual framework in the evaluation process of social interventions for the sustainable development of tourism recipient and beneficiary communities.

Cluster 2 is the second largest research theme and focuses on tourism management. Tourism management covers two levels of connotation, including governance issues and stakeholder management. Dangi and Jamal (2016) developed a preliminary framework of sustainable community-based tourism (SCBT), with the aim to address equity, justice, and ethical and governance issues in the PPT development process. Tolkach and King (2015) emphasized that the success of a PPT network relies on communications among stakeholders that maintain a balance of power.

Cluster 3 is the third largest research theme and is related to sustainable tourism. Sustainable tourism has three points: environmental impacts, social responsibility, and investment effectiveness. Figueroa and Rotarou (2016) analyzed the negative environmental impacts of

Fig. 6. Keywords cloud of PPT research between 2008 and 2013.

Fig. 7. Keywords cloud of PPT research between 2014 and 2018.

Table 4
Keywords clusters analysis of PPT research.

Cluster ID	Size	Silhouette	Cluster label (LLR)	Mean year
1	11	0.64	#0 Development	2015
2	11	0.836	#1 Tourism management	2016
3	9	0.739	#2 Sustainable tourism	2012
4	9	0.594	#3 Protected areas	2013
5	7	0.713	#4 Poverty	2016
6	7	0.608	#5 Slum tourism	2014

Fig. 8. Keywords cluster analysis.

tourism growth. Medina-Muñoz et al. (2016) analyzed the engagement of tourism enterprises in alleviating poverty and found that their contribution to poverty reduction was linked to voluntary social responsibility initiatives and organization size. Banerjee, Cicowiez, and Gachot (2015b) provided a quantitative framework for assessing the effectiveness of public investment in PPT, including unemployment rate, income level, and regional productive capacity.

Responsible tourism is closely related to sustainable tourism. Goodwin (2011) noted that "taking responsibility for tourism is about the globally vital necessity of achieving sustainable tourism." The sustainable orientation of responsible tourism is also emphasized by Smith (1990), who defined responsible tourism as "a type of tourism which respects the host's natural, built and cultural environments as well as the interest of all parties concerned." Chettiparamb and Kokkranikal

(2012) argued that "responsible tourism" refers to every related concept on the issue and therefore adds nothing to the conceptual terrain of tourism trends and nomenclatures. There is no distinction between responsible tourism and sustainable tourism. A growing number of tourism studies tend to use "sustainable tourism" rather than "responsible tourism." Responsible tourism also has similarities with PPT. PPT mainly focuses on the re-distributive dimension of sustainable tourism, ensuring that tourism produces more benefits to the poor (Scheyvens & Momsen, 2008). Responsible tourism aims at making everyone involved take responsibility for promoting more sustainable tourism. The aim to involve everyone taking responsibility for everything weakens the role of responsible tourism in PPT research. All the above points seem to lead to the fact that responsible tourism gradually fades from PPT research.

Cluster 4 refers to research related to protected areas. Protected areas convey two levels of meaning: resource utilization and livelihood. Typically, there is a rich heritage of palaeontological, archaeological, and geological exposure in protected areas. This has been a double-edged sword for PPT. In terms of protected areas, environmental systems are often fragile with respect to tourism development. Overexploitation will lead to huge environmental risks. Hence, the ongoing challenge is to balance the relationship among tourism, protected areas, and local communities/indigenous peoples. Soliman (2015) identified the barriers to PPT development in Fayoum's protected areas and examined how positive impacts could be improved. Negi and Nautiya1 (2003) provided a policy framework aimed at protecting the livelihood of the indigenous peoples in the protected area during the PPT development process.

Poverty status is the context of PPT development. *Cluster 5* refers to research that focuses on this contextual factor. Poverty has two layers of meaning: poor people and poor regions. Knight (2018) applied Jessop's (2008) strategic-relational approach to analyze the institutional situation of local people and provide targeted strategies to enhance PPT outcomes. Ghasemi and Hamzah (2014) investigated the rationality of tourism paradigms developed in poor regions from the perspectives of stakeholders and revealed the selection preference of different stakeholder groups on tourism patterns.

Cluster 6 refers to research that focuses on the concept of slum tourism. A slum is a literal concept of location, which refers to "an area of a city that is in a very bad condition where very poor people live." It is notable that the initial reflections of slum tourism mainly focused on the case of South Africa (Frenzel & Koens, 2012). Slum tourism is a relatively young field of interdisciplinary tourism research and has a very close relationship with poverty issues. Additionally, Africa, South Africa, and Saharan Africa are all high-frequency keywords in PPT-

Table 5
Description of PPT research clusters.

Cluster ID	Cluster label (from CiteSpace)	Cluster name	Dimension	Representative article
1	#0 Development	Development	Regional development	Adiyia and Vanneste (2018)
			Development pattern	Bakker and Messerli (2017)
			Social development	Brito (2018)
2	#1 Tourism management	Governance	Governance issues	Dangi and Jamal (2016)
			Stakeholder management	Tolkach and King (2015)
3	#2 Sustainable tourism	Sustainability pillars	Social responsibility	Medina-Muñoz, Medina-Muñoz, and Gutiérrez-Pérez (2016)
			Environmental impacts	Figueroa and Rotarou (2016)
			Investment effectiveness	Banerjee, Cicowiez, and Gachot (2015a)
4	#3 Protected areas	Livelihood	Resource utilization	Soliman (2015)
			Livelihood	Negi and Nautiya1 (2003)
5	#4 Poverty	Poverty	Poor people	Knight (2018)
			Poor region	Ghasemi and Hamzah (2014)
6	#5 Slum tourism	Slum tourism	Tourism products	Mekawy (2012)

related studies (as shown in Table 3). Perhaps that is why slum tourism came up as a cluster, and other types of tourism don't. Slum tourism is defined as tourism that involves visiting poverty-stricken areas. PPT in a narrow sense emphasizes the need not to create new tourism products for poverty reduction, but rather to make existing tourism offerings more beneficial to the poor. Slum tourism, instead, pays more attention to new tourism products. Slum tourism also moves away from the primary economic definitions of poverty and examines the effectiveness of PPT in a more holistic and responsible way. That is, slum tourism attaches more importance to the global, local, and community context in which tourism develops. Mekawy (2012) presented the selection criteria of appropriate pro-poor products based on local stakeholders' preferences.

5. The co-citation analysis

5.1. Journal co-citation network

Co-citation refers to the frequency with which two papers are cited together by other papers (Small, 1973) and is considered a proximity measure for papers. In the current study, co-citation analysis includes author co-citation analysis, journal co-citation analysis, and article co-citation analysis.

The references cited by the 164 retrieved articles were analyzed, and a journal co-citation network with 179 nodes and 521 links was developed to explore the most prominent cited journals, as shown in Fig. 9. The node size indicates the co-citation frequency of each journal. With regard to the co-citation frequency, the top five most influential journals were *Annals of Tourism Research* (total citations = 72), *Tourism Management* (total citations = 66), *Current Issues in Tourism* (total citations = 58), *Journal of Sustainable Tourism* (total citations = 56), and *Tourism Geographies* (total citations = 33). It is noteworthy that these five journals were also listed as the top source journals (as shown in Table 2 and Table 6) in which articles on PPT were published. Therefore, journals with more contributions to PPT research also attracted more attention. Fig. 9 also shows that some nodes have high centralities, such as *Journal of Travel Research* (centrality = 0.46), *Development Southern Africa* (centrality = 0.21), *Tourism Recreation Research* (centrality = 0.19), and *World Development* (centrality = 0.12). These journals present critical intellectual turning points and link journals in different areas.

5.2. Author co-citation network

Author co-citation analysis can be used to identify the relationships among authors, to show whose publications were cited by the same articles, and to explore the evolution of research communities (Zhao, 2017). Fig. 10 represents the author co-citation network, covering 228 nodes and 725 links. The node size indicates the frequency of co-

Fig. 9. Journal co-citation network.

Table 6
The top 15 cited journals.

No.	Total citations	Centrality	Journal
1	72	0.15	Annals of Tourism Research
2	66	0.14	Tourism Management
3	58	0.06	Current Issues in Tourism
4	56	0.13	Journal of Sustainable Tourism
5	33	0.22	Tourism Geographies
6	30	0.06	Third World Quarterly
7	30	0.09	International Journal of Tourism Research
8	27	0.19	Tourism Recreation Research
9	27	0.21	Development Southern Africa
10	19	0.12	World Development
11	18	0.10	Tourism Planning and Development
12	18	0.04	Sustainability
13	17	0.46	Journal of Travel Research
14	10	0.03	Journal of Policy Research in Tourism
15	9	0.00	Asia Pacific Journal of Tourism Research

citations of each author, and the links between different authors refer to indirect cooperative relations established based on co-citation frequency.

Fig. 10. Author co-citation network.

Table 7
The top 15 cited authors.

No.	Total citations	Centrality	Author
1	56	0.16	Regina Scheyvens
2	49	0.13	Caroline Ashley
3	43	0.31	Harold Goodwin
4	42	0.09	David Harrison
5	37	0.14	Jonathan Mitchell
6	31	0.12	Colin Michael Hall
7	28	0.04	Anna Spenceley
8	18	0.1	Martin Mowforth
9	17	0.13	Stephanie Chok
10	14	0.02	Dorothea Meyer
11	13	0.11	Adam Blake
12	11	0.02	John Brohman
13	11	0.01	Richard Sharpley
14	10	0.01	Stefan Gössling
15	10	0.01	María José Zapata Campos

As shown in Table 7, the highly cited authors were therefore identified, including Regina Scheyvens (frequency = 56, New Zealand), Caroline Ashley (frequency = 49, U.K.), Harold Goodwin (frequency = 42, U.K.), David Harrison (frequency = 42, Fiji), Jonathan Mitchell (frequency = 37, U.K.), Colin Michael Hall (frequency = 31, New Zealand), Anna Spenceley (frequency = 28, South Africa), Martin Mowforth (frequency = 18, U.K.), Stephanie Chok (frequency = 17, Australia), Dorothea Meyer (frequency = 14, U.K.), and Adam Blake (frequency = 13, U.K.). In the PPT area, more than half of the most influential researchers come from the U.K. In addition, PPT researchers from Oceania (e.g., New Zealand, Australia, Fiji) and Africa (e.g., South Africa) also occupied a significant position. The diversities in the location of these authors indicate that PPT research has been developed and spread worldwide.

5.3. Article co-citation network

Article co-citation analysis can identify the underlying intellectual structure of the research domain and manifest the authority of the references cited by publications. The top 15 cited articles identified by this process are summarized in Table 8. More specifically, Mitchell and Ashley (2010), Harrison (2008), Scheyvens (2011), and Zapata, Hall, Lindo, and Vanderschaeghe (2011) had received 25, 20, 10, and 10

Table 8
The top 15 cited articles.

No.	Total citations	Centrality	Article
1	25	0.15	Mitchell and Ashley (2010)
2	20	0.09	Harrison (2008)
3	10	0.18	Scheyvens (2011)
4	10	0.13	Zapata et al. (2011)
5	9	0.14	Scheyvens (2009)
6	9	0.03	Spenceley and Meyer (2012)
7	9	0.08	Meyer (2009)
8	9	0.08	Scheyvens (2007)
9	7	0.04	Goodwin (2009)
10	7	0	Goodwin (2009)
11	6	0.09	Hummel and van der Duim (2012)
12	5	0.02	Mowforth and Munt (2015)
13	5	0.17	Butler, Curran, and O'Gorman (2013)
14	5	0.07	Harrison and Schipani (2007)
15	4	0	Meyer (2009)

citations, respectively, and occupied the top four positions. Mitchell and Ashley (2010) explored the impact pathways of tourism on poverty reduction. Harrison (2008) sorted out the development history and main features of PPT and suggested that PPT research should focus more on development itself rather than tourism patterns. Scheyvens (2011) analyzed the effectiveness of tourism on poverty alleviation based on case studies in Fiji, the Caribbean, and the Maldives. Zapata et al. (2011) examined the viability of community-based tourism to support poverty alleviation through a Nicaraguan case study.

The article co-citations network, containing 119 nodes and 295 links, is presented in Fig. 11. Each node denotes an article and is labeled with the first author's name and the publication year. Each link represents the co-citation relationship between the two articles. The node size represents the co-citation frequency of the node article. It is notable that the node articles were among the 2970 documents cited in the 164 retrieved records and were not necessarily included in the 164 retrieved articles.

Articles with high centrality (Table 8) are also worthy of investigation. In addition to the articles mentioned earlier, those represented included the following: Butler et al. (2013) (centrality = 0.17), Scheyvens (2009) (centrality = 0.14), Hummel and van der Duim (2012) (centrality = 0.09), Meyer (2009) (centrality = 0.08), and Scheyvens (2007) (centrality = 0.08). These articles represent
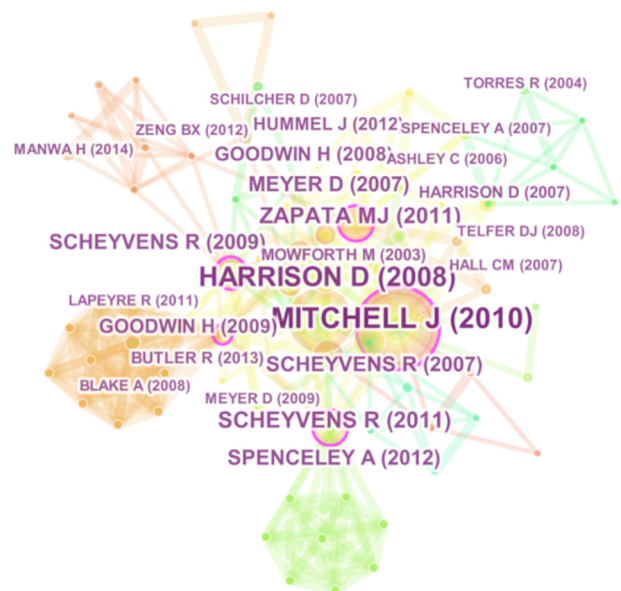
Fig. 11. Article co-citation network.

References	Year	Strength	Begin	End	2002 - 2018
MOWFORTH M, 2003, TOURISM SUSTAINABILI, V0, P0	2003	4.5471	**2002**	2010	
ASHLEY C, 2001, PROPOOR TOURISM STRA, V0, P0	2001	3.1194	**2002**	2008	
MEYER D, 2007, CURRENT ISSUES IN TOURISM, V10, P558, DOI	2007	3.4629	**2010**	2013	

Fig. 12. Top three references with the strongest citation burst.

major intellectual milestones in PPT research.

Furthermore, strong citation bursts were found in three documents (Fig. 12): Mowforth and Munt (2015) (burst strength = 4.5471, 2003–2011), Ashley and Roe (2001) (burst strength = 3.1194, 2002–2008), and Meyer (2009) (burst strength = 3.4629, 2010–2014). These findings indicated that the citations of these articles increased sharply during this period. In terms of CiteSpace, the burst detection function is based on the algorithm created by Kleinberg (2003). A co-citation burst shows evidence that a particular article is associated with a violent fluctuation of cited frequency. Mowforth and Munt (2015) revealed the social, economic, and environmental conditions that affect the tourism industry and analyzed how tourism helps narrow the glaring inequality between the rich and the poor. Ashley and Roe (2001) demonstrated the implementation process of PPT strategies via an analysis of six aspects: expanding business opportunities and employment opportunities, enhancing collective benefits, mitigating environmental impacts, addressing social and cultural impacts, promoting participation, and bridging the private sector into pro-poor partnerships.

6. Discussion and conclusions

The past two decades have witnessed the growth of tourism as an important tool in fighting rural poverty. This paper provides a scientometric analysis to explore the patterns and trends of PPT research. A total of 164 articles were collected from the WoS Core Collection database and Scopus. The keywords co-occurrence analysis, word cloud analysis, cluster analysis, and co-citation analysis were applied to identify and visualize the status of PPT research.

The keywords "pro-poor tourism," "tourism," "tourism development," "poverty alleviation," "Africa," and "ecotourism," had the most frequency, while "ethics," "policy," "sustainable tourism," "sustainable development," "sustainable development," "reduction," and "impact" demonstrated the most centrality. Moreover, "tourism development," "tourism," "Saharan African," and "management" received citation bursts over the two decades under investigation. Six research themes were identified based on the keywords cluster analysis. Thus, some important topics related to PPT research can be summarized: development, tourism management, sustainable tourism, protected areas, poverty, and slum tourism.

Extensive research on PPT provides the opportunity for contributions to mainstream tourism theory. Many studies have proposed frameworks for specific aspects of PPT research. Nevertheless, few have been based on scientometric analysis and thereby justified by recent trends in the literature. Tourism is a highly resource-intensive industry with a substantial ecological footprint (Chok et al., 2007). PPT is driven by different types of resources. Both keywords co-occurrence analysis and cluster analysis reveal three types of resources that are mainly involved when adopting pro-poor strategies. First, "Africa," "South Africa," "protected area," and "place" are all high-frequency keywords. Both "slum tourism" and "protected area" emerge as independent clusters. Location (or geographical landscape) is an important type of tangible resource and influencing factor to promote PPT. Second, tourism is highly dependent upon culture, which involves assets that some of the poor have (Rogerson, 2006). Cultural factors are relatively scattered and don't appear as high-frequency keywords. Nevertheless, a lot of high-frequency keywords have close relationships with "culture." For example, in the context of PPT, "development" is best achieved by

alleviating poverty, reducing unemployment, and later by increasing cultural independence (Harrison, 2008). Through a systematic review of 164 PPT papers, it can be seen that a series of tourism patterns (e.g., ethnic tourism, tribal tourism, and heritage tourism) are based on cultural resources and contribute greatly to the pro-poor growth and development. Culture is an important kind of intangible resource to promote pro-poor strategies. Third, tourism is one of the world's largest industries, with a global economic contribution of over 7.6 trillion U.S. dollars in 2016 (Statista, 2017). The rapid development of the tourism industry cannot be achieved without the support of other industries. Several industries have been mentioned in the 164 PPT papers, such as agriculture (Pillay & Rogerson, 2013), hospitality (Sinclair-Maragh, 2016), and accommodation (Adiyia & Vanneste, 2018), as well as e-commerce (Masele, 2015). The collaboration among different industries forms the tourism value chain that shapes the capability of obtaining benefits of the poor. Therefore, the industry is another important type of tangible resource influencing PPT development.

In summary, location, culture, and industry cover the most important resources in developing PPT. Location is more of a natural endowment, while culture and industry are more like social endowment and economic endowment, respectively. Therefore, the current study analyzes the three interrelated aspects (i.e., location, industry, and culture) that convert resources to implement pro-poor paths. Meanwhile, the development process of PPT includes three stages, with the focus shifting from economic aspects to environmental and social aspects. On this basis, the three pillars of sustainability are used to discuss the direction of pro-poor paths. In addition, 164 PPT papers have different research foci, ranging from macroeconomic theories and policies to microcosmic cases and initiatives. Thus, the macro-micro perspective is adopted to analyze the level of pro-poor paths. Finally, the current study provides a three-dimensional view involving the main elements of pro-poor paths, namely resource (endowment/power), emphasis (direction), and focus (level), as shown in Fig. 13.

The above three-dimensional view is also in line with the perspective of capabilities-based resources (Chabowski, Mena, & Gonzalez-Padron, 2011). First, according to Barney (1991), resources can develop into capabilities for PPT. Second, capabilities can become different levels of competitive advantage (Day, 1994). Third, competitive advantages can form sustainable directions and paths for PPT (Lapeyre, 2010). Therefore, this study develops a three-dimensional framework
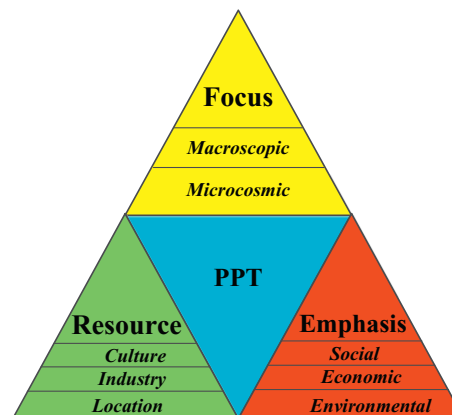
Fig. 13. Integrated PPT research framework.

that incorporates the PPT strategy's focus (macroscopic-microcosmic), emphasis (social-environmental-economic), and dependent resource (culture-industry-location).

The focus of a PPT strategy can be divided into two types, namely the macroscopic level and microcosmic level. As for the macroscopic level, the pro-poor strategic targets refer to worldwide/national/regional development and include topics centered on regional income inequality (Raza & Shah, 2017), national PPT policy (Rogerson & Van der Merwe, 2016), PPT's role in global health (Bauer, 2015), public investment in PPT (Banerjee et al., 2015a), PPT and the millennium development goals (Saarinen & Rogerson, 2014), PPT policy mix (Theerapappisit, 2009), and PPT value chain (Mitchell, 2012; Nadkarni & Beesely, 2008; Thomas, 2014). At the microcosmic level, the PPT strategy focuses on poor groups and related stakeholders as well as community/village development, including residents' expectations on tourism development (Akyeampong, 2011), the engagement of tourism enterprises in PPT (Medina-Muñoz et al., 2016), e-commerce providers in PPT promotion (Masele, 2015), PPT accommodation providers (Pillay & Rogerson, 2013), and the local people's participation in PPT planning (Espiner, Stewart, & Lama, 2016; Ghasemi & Hamzah, 2014).

The areas of emphasis within a PPT strategy include social, economic, and environmental aspects. The original task of PPT is to encourage poverty alleviation and economic development (Matiza & Oni, 2014; Yu, 2017). With high PPT growth, social and environmental problems, such as social inequalities and threats to natural and cultural resources, have become apparent (Ashley & Roe, 2002; Eligh, Welford, & Ytterhus, 2002). Therefore, social and environmental issues in PPT development have received increasing attention in recent years. More specifically, environmental issues mainly refer to the environmental impacts of PPT development and include topics centered on the environmental consequences of vast PPT growth (Figueroa & Rotarou, 2016), rural environmental development in the PPT process (Škrbić, Jegdić, & Milošević, 2018), protected area management in PPT (Negi & Nautiya1, 2003), eco-tourism for the pro-poor aspect (Cobbinah, Amenuvor, Black, & Peprah, 2017), and climate change and PPT efforts (Sinclair-Maragh, 2016). Social issues mainly refer to the social interventions based on PPT (Brito, 2018), such as equitable development through PPT (Tremblay-Huet, 2016), social benefits of PPT (Day & Mody, 2017), social entrepreneurship in PPT development (Zeng, 2018), social accounting in PPT (Croes & Rivera, 2017), and the social efforts of PPT (Hui, 2010).

The resources of a PPT strategy include cultural resources, industry resources, and location resources. The successful implementation of PPT must combine resource advantages in an effective manner. Cultural-driven tourism has been considered as an effective approach to promote and reinforce native culture as well as provide pro-poor benefits to the local community, such as tribal tourism (Pratt et al., 2013), minority culture eco-tourism (Li, 2015), and ethnic tourism (Phommavong & Sörensson, 2014). Industry-driven tourism is another important implementation form of PPT, such as enhancing the linkages between PPT and small-scale agriculture (Sanches-Pereira et al., 2017), the green catering industry (Xie, Liu, & Peng, 2017), the health care sector (Medhekar, 2014), and the hotel industry (Fortanier & Wijk, 2010). Furthermore, location is an important condition for tourism development. Location condition is an integrated concept that includes geographical advantages, natural resources, and transport conveniences. It is a type of resource endowment in nature. Location-driven tourism has been widely applied in PPT areas and includes such examples as PPT in a first-world urban setting (Butler et al., 2013), world heritage sites and PPT development (Chakravarty & Irazábal, 2011), enclave tourism (Anderson, 2011), and coastal route tourism (Myles, 2014).

Differences in location (e.g., rural or urban areas) lead to different PPT development paths. It is notable that the search for new PPT niches and the development of innovative PPT products adopts a focus in rural areas on cultural and heritage tourism and in urban areas on promoting

Table 9
Topic classification of PPT research.

No.	Capabilities-based resources
1	Macroscopic-social-culture
2	Macroscopic-social-industry
3	Macroscopic-social-location
4	Macroscopic-economic-culture
5	Macroscopic-economic-industry
6	Macroscopic-economic-location
7	Macroscopic-environmental-culture
8	Macroscopic-environmental-industry
9	Macroscopic-environmental-location
10	Microcosmic-social-culture
11	Microcosmic-social-industry
12	Microcosmic-social-location
13	Microcosmic-economic-culture
14	Microcosmic-economic-industry
15	Microcosmic-economic-location
16	Microcosmic-environmental-location
17	Microcosmic-environmental-industry
18	Microcosmic-environmental-culture

township tourism and exploring new inner-city frontiers in slum tourism (Rogerson, 2018). Furthermore, urban tourism is growing rapidly because of the non-leisure forms of tourism. In the globalizing era, business tourism emerges as a key driver for urban tourism. A research gap within urban PPT development remains with regard to the phenomenon of business tourism. Instead, the fast development of rural tourism mainly hinges on leisure forms of tourism. There is enormous potential to explore the contribution of leisure PPT tourism in rural areas. In addition, the boom of the informal sector tourism (e.g., Airbnb) encompasses mobilities for the purposes of leisure, business, and religion, bringing numerous opportunities for PPT development in both rural and urban areas.

To provide guidance for future research, the three aspects of PPT discussed (emphasis, focus, and resource) should be integrated for further examination (as shown in Fig. 13). More specifically, there are 18 possible conditions (Table 9) for capabilities-based resources focusing on PPT, including macroscopic-microcosmic, social-economic-environmental, and location-industry-culture-driven measures. First, since most of the PPT research examines the issue at the global/national/regional level, the macroscopic focus remains the dominant perspective. The macro-level PPT research typically applies a case study approach, and most of the cases are derived from developing countries in Africa (e.g., South Africa, Ghana, Gambia, Egypt, and Zimbabwe) and Asia (e.g., China, India, Cambodia, Indonesia, and Laos). Currently, micro-level PPT is still relatively underrepresented in the research. The existing micro-level PPT research mainly focuses on community/stakeholder engagement. Nevertheless, stakeholder interests and influences, the stakeholder management process, and stakeholder analysis methods (e.g., social network analysis) in PPT research have not been exploited sufficiently. These issues need to be further resolved in future research. Second, economic and social aspects are the main emphasis in PPT research. As specified, economic issues include income equality and distribution as well as economic development and benefits; social issues involve ethnic tourism, social responsibility, and infrastructure. In recent years, sustainable PPT has attracted increasing attention. Environmental issues, including eco-collapse, protected areas, and eco-tourism have emerged as areas of interest in recent years. Furthermore, it is noteworthy that the protection of tourism resources is a hot topic in the PPT area. Third, there are three main driving modes in the PPT development process. The location-driven mode relies on the natural endowments and resources in certain areas. The industry-driven mode is supported by the industrial advantage of tourism destinations. Finally, the culture-driven mode depends on historical human resources. These three types of modes are relatively independent and can promote development mutually.

Table 10
Current status and trends in PPT research.

No.	Capabilities-based resource	Topic	Relevant studies	Time periods
1	Macroscopic-social-culture	Community-based tourism	Harrison and Schipani (2007).	2002–2007
		Tribal tourism	Pratt et al. (2013)	2008–2013
		Adventure tourism	Giddy (2016)	2014–2018
5	Macroscopic-economic-industry	Tourism and agriculture	Torres and Momsen (2004)	2002–2007
		Tourism-agriculture linkages	Rogerson (2012)	2008–2013
		Local economic development	Musavengane (2018)	2014–2018
9	Macroscopic-environmental-location	Protected area management	Negi and Nautiya1 (2003)	2002–2007
		Wildlife conservation	Richardson, Fernandez, Tschirley, and Tembo (2012)	2008–2013
		Eco-collapse	Figueroa and Rotarou (2016)	2014–2018
10	Microcosmic-social-culture	Tourism and race	Burns and Barrie (2005)	2002–2007
		Tourism and religious experience	Kasim (2011)	2008–2013
		Social accounting matrix	Croes and Rivera (2017)	2014–2018
14	Microcosmic-economic-industry	From philanthropy to doing business	Ashley and Haysom (2006)	2002–2007
		Community corporate joint ventures	Torres, Skillicorn, and Nelson (2011)	2008–2013
		Local tourism value chain linkages	Adiyia and Vanneste (2018)	2014–2018

Table 10 summarizes the current status of PPT research. No. 3, 5, 7, 12, and 14 received the most attention over the decade examined, while the other 13 positions call for further studies on topics such as the social conflict network of PPT stakeholders in land use and industrial development (positions 11 and 13), public-private partnership in sustainable PPT development (positions 8 and 9), and the social spillover effect of the PPT implementation process on regional environment (positions 4 and 5). This study regards co-citations as a quantitatively rigorous measure of similarity (Mccain, 1990). However, since this method is based on past research development, the current study is limited and does not anticipate all possible future research topics. By identifying the recently published works as indicators of new contributions to the PPT literature, this study integrated recent research phenomena as a basis for future research directions. Noteworthy, the current scientometric analysis only covered 164 PPT papers. Other research trends might exist that went undetected in our analysis and may develop into new PPT-specific paradigms.

In summary, this paper provides a longitudinal and holistic view of PPT research for both researchers and practitioners. Influential scholars and articles, the state of the art of PPT research, and future directions of PPT development are identified for researchers. Furthermore, this paper allows practitioners to form a comprehensive understanding of PPT to develop better pro-poor initiatives. The integrated PPT research framework can also be used to explore new research topics.

The scientometric review reveals the status and patterns in PPT research. Nonetheless, the following limitations of this study must be considered when reviewing the findings.

First, this study only searched PPT-related terms from titles, abstracts, and keywords of the paper during the retrieval process. There may be some other papers that demonstrate latent poverty alleviation objectives but don't include the specified terms (e.g., poverty and pro-poor) in their abstracts, titles, or keywords. To overcome this limitation, this study runs the second-round review through document collection by searching PPT-related terms in the full text and then incorporates "slum" into the search terms. The term "slum" is closely related to "poverty" and occurs frequently in PPT-related studies (Dyson, 2012; Frenzel & Koens, 2012; King & Dinkoksung, 2014; Mekawy, 2012). Thus, the final search schema of this study is expected to identify most of the PPT-related works.

Other limitations are related to the software of this study. CiteSpace is designed as a tool for progressive knowledge domain visualization (Chen, 2006). It is one of the most popular software programs in the scientometric analysis, which has been widely applied in exploring the tourism management research, such as climate change and tourism (Fang et al., 2018), tourism crisis and disaster management (Jiang, Ritchie, & Benckendorff, 2017), and smart tourism (Zhang, Wang, Hao, & Yu, 2016). Noteworthy is that CiteSpace can only process the

bibliometric data from limited databases, such as Web of Science, Scopus, Derwent, and PubMed. Nevertheless, the combination of Web of Science and Scopus are considered to be sufficient to include most of the important works in the research field (He et al., 2017).

Conflict of interest

There is no conflict of interest.

References

Adiyia, B., & Vanneste, D. (2018). Local tourism value chain linkages as pro-poor tools for regional development in western Uganda. *Development Southern Africa,* 1–15.

Anderson, W. (2011). Enclave tourism and its socio-economic impact in emerging destinations. *Anatolia, 22*(3), 361–377.

Ashley, C., & Haysom, G. (2006). From philanthropy to a different way of doing business: Strategies and challenges in integrating pro-poor approaches into tourism business. *Development Southern Africa, 23*(2), 265–280.

Ashley, C., & Mitchell, J. (2009). *Tourism and Poverty Reduction: Pathways to Prosperity.* London: Routledge.

Ashley, C., & Roe, D. (2001). *Pro-poor Tourism Strategies: Making Tourism Work for the Poor: A Review of Experience. no. 1.* Iied.

Ashley, C., & Roe, D. (2002). Making tourism work for the poor: Strategies and challenges in southern Africa. *Development Southern Africa, 19*(1), 61–82.

Bakker, M., & Messerli, H. R. (2017). Inclusive growth versus pro-poor growth: Implications for tourism development. *Tourism and Hospitality Research, 17*(4), 384–391.

Belshaw, D. (2002). Presidential Address Strategising Poverty Reduction in Sub-Saharan Africa: the Role of Small-scale Agriculture. *Journal of Agricultural Economics, 53*(2), 161–193.

Banerjee, O., Cicowiez, M., & Gachot, S. (2015a). A quantitative framework for assessing public investment in tourism–an application to Haiti. *Tourism Management, 51,* 157–173.

Banerjee, O., Cicowiez, M., & Gachot, S. (2015b). A quantitative framework for assessing public investment in tourism - an application to Haiti. *Tourism Management, 51,* 157–173.

Barney, J. (1991). Firm resource and sustained competitive advantage. *Journal of Management, 17*(1), 99–120.

Bauer, I. L. (2015). Improving global health–is tourism's role in poverty elimination perpetuating poverty, powerlessness and 'ill-being'? *Global Public Health, 12*(1), 1.

Blake, A., Arbache, J. S., Sinclair, M. T., & Teles, V. (2008). Tourism and poverty relief. *Annals of Tourism Research, 35*(1), 107–126.

Booyens, I. (2010). Rethinking township tourism: Towards responsible tourism development in south African townships. *Development Southern Africa, 27*(2), 273–287.

Brito, G. M. W. (2018). Evaluation of social interventions based on tourism using the methodological approach of realistic assessment. *PASOS: Revista de Turismo y Patrimonio Cultural, 16*(2), 501–522.

Burns, P. M., & Barrie, S. (2005). Race, space and 'our own piece of Africa': Doing good in Luphisi village? *Journal of Sustainable Tourism, 13*(5), 468–485.

Butler, R., Curran, R., & O'Gorman, K. D. (2013). Pro-poor tourism in a first world urban setting: Case study of Glasgow Govan. *International Journal of Tourism Research,*

15(5), 443–457.

Chabowski, B. R., Mena, J. A., & Gonzalez-Padron, T. L. (2011). The structure of sustainability research in marketing, 1958–2008: A basis for future research opportunities. *Journal of the Academy of Marketing Science, 39*(1), 55–70.

Chakravarty, S., & Irazábal, C. (2011). Golden geese or white elephants? The paradoxes of world heritage sites and community-based tourism development in Agra, India. *Community Development, 42*(3), 359–376.

Chen, C. (2006). CiteSpace II: Detecting and visualizing emerging trends and transient patterns in scientific literature. *Journal of the American Society for Information Science and Technology, 57*(3), 359–377.

Chen, C. (2014). *The CiteSpace Manual.* (Retrieved 24 November 2018, from http://cluster.ischool.drexel.edu/~cchen/citespace/CiteSpaceManual.pdf).

Chettiparamb, A., & Kokkranikal, J. (2012). Responsible tourism and sustainability: The case of Kumarakom in Kerala, India. *Journal of Policy Research in Tourism, Leisure and Events, 4*(3), 302–326.

Child, A. (2018). Beyond the cooperative: The story of collective action in North Carolina's small-scale fisheries. *Maritime Studies, 17*(1), 27–39.

Chok, S., Macbeth, J., & Warren, C. (2007). Tourism as a tool for poverty alleviation: A critical analysis of 'pro-poor tourism'and implications for sustainability. *Current Issues in Tourism, 10*(2–3), 144–165.

Clarivate Analytics (2017). *Source Publication List for Web of Science.* retrieved from: http://mjl.clarivate.com/publist_sciex.pdf).

Cobbinah, P. B., Amenuvor, D., Black, R., & Peprah, C. (2017). Ecotourism in the Kakum conservation area, Ghana: Local politics, practice and outcome. *Journal of Outdoor Recreation and Tourism, 20*, 34–44.

Croes, R., & Rivera, M. A. (2017). Tourism's potential to benefit the poor: A social accounting matrix model applied to Ecuador. *Tourism Economics the Business & Finance of Tourism & Recreation, 23*(1), 29–48.

Dangi, T. B., & Jamal, T. (2016). An integrated approach to "sustainable community-based tourism". *Sustainability, 8*(5), 475.

Day, G. S. (1994). The capabilities of market-driven organizations. *Journal of Marketing, 58*(4), 37–52.

Day, J., & Mody, M. (2017). Social entrepreneurship typologies and tourism: Conceptual frameworks. *Social Entrepreneurship and Tourism.* Springer International Publishing.

Delen, D., & Crossland, M. D. (2008). Seeding the survey and analysis of research literature with text mining. *Expert Systems with Applications, 34*(3), 1707–1720.

Denicolai, S., Cioccarelli, G., & Zucchella, A. (2010). Resource-based local development and networked core-competencies for tourism excellence. *Tourism Management, 31*(2), 260–266.

DFID (1999). *Tourism and Poverty Elimination: Untapped Potential.* UK: DFID (retrieved from: http://www.propoortourism.org.uk/dfid_summary.PDF).

Duarte Alonso, A., Kok, S., & O'Brien, S. (2018). 'We are only scratching the surface'–a resource-based and dynamic capabilities approach in the context of culinary tourism development. *Tourism Recreation Research,* 1–16.

Dyson, P. (2012). Slum tourism: Representing and interpreting 'reality'in Dharavi, Mumbai. *Tourism Geographies, 14*(2), 254–274.

Eligh, J., Welford, R., & Ytterhus, B. (2002). The production of sustainable tourism: Concepts and examples from Norway. *Sustainable Development, 10*(4), 223–234.

Elsevier (2018). *Scopus: keep your eye on global research.* (retrieved from: https://www.elsevier.com/__data/assets/pdf_file/0008/208772/ACAD_R_SC_FS.pdf).

Espiner, S., Stewart, E. J., & Lama, L. T. (2016). Assessing the effectiveness of 'appreciative inquiry' (ai) in nepali pro-poor tourism (ppt) development processes. *Tourism Planning & Development, 14*(3), 1–20.

Fang, Y., Yin, J., & Wu, B. (2018). Climate change and tourism: A scientometric analysis using CiteSpace. *Journal of Sustainable Tourism, 26*(1), 108–126.

Figueroa, B. E., & Rotarou, E. S. (2016). Sustainable development or eco-collapse: Lessons for tourism and development from Easter Island. *Sustainability, 8*(11), 1093.

Fortanier, F., & Wijk, J. V. (2010). Sustainable tourism industry development in sub-saharan africa: Consequences of foreign hotels for local employment. *International Business Review, 19*(2), 191–205.

Foster, J. E. (1998). Absolute versus relative poverty. *The American Economic Review, 88*(3), 335–341.

Frenzel, F., & Koens, K. (2012). Slum tourism: Developments in a young field of interdisciplinary tourism research. *Tourism Geographies, 14*(2), 195–212.

Gascón, J. (2015). Pro-poor tourism as a strategy to fight rural poverty: A critique. *Journal of Agrarian Change, 15*(4), 499–518.

Ghasemi, M., & Hamzah, A. (2014). An investigation of the appropriateness of tourism development paradigms in rural areas from main tourism stakeholders' point of view. *Procedia-Social and Behavioral Sciences, 144*, 15–24.

Giddy, J. K. (2016). Adventure tourism in South Africa: Challenges and prospects. *Turizam: međunarodni znanstveno-stručni časopis, 64*(4), 451–455.

Goodwin, H. (2009). Reflections on 10 years of pro-poor tourism. *Journal of Policy Research in Tourism, Leisure and Events, 1*(1), 90–94.

Goodwin, H. (2011). *Taking Responsibility for Tourism.* Woodeaton: Goodfellow Publishers Limited.

Goodwin, H., Brown, F., & Hall, D. (2008). Pro-poor tourism: a response. *Third World Quarterly, 29*(5), 869–871.

Hallin, C. A., & Marnburg, E. (2008). Knowledge management in the hospitality industry: A review of empirical research. *Tourism Management, 29*(2), 366–381.

Handaru, A. W. (2018). Pro-poor tourism: Findings from Bangka Island, Indonesia. *Academy of Strategic Management Journal, 17*(2).

Harrison, D. (2008). Pro-poor tourism: A critique. *Third World Quarterly, 29*(5), 851–868.

Harrison, D., & Schipani, S. (2007). Lao tourism and poverty alleviation: Community-based tourism and the private sector. *Current Issues in Tourism, 10*(2–3), 194–230.

Hazari, B. R., & Nowak, J. J. (2003). Tourism, taxes and immiserization: A trade theoretic analysis. *Pacific Economic Review, 8*(3), 279–287.

He, Q., Wang, G., Luo, L., Shi, Q., Xie, J., & Meng, X. (2017). Mapping the managerial areas of building information modeling (BIM) using scientometric analysis. *International Journal of Project Management, 35*(4), 670–685.

Hui, S. (2010). *Research on the Social Effect of Pro-poor Tourism. The International Conference on Industrial Mechatronics and Automation. Vol. 2,* 132–134.

Hummel, J., & van der Duim, R. (2012). Tourism and development at work: 15 years of tourism and poverty reduction within the SNV Netherlands development organisation. *Journal of Sustainable Tourism, 20*(3), 319–338.

Jamal, T., Camargo, B. A., & Wilson, E. (2013). Critical omissions and new directions for sustainable tourism: A situated macro–micro approach. *Sustainability, 5*(11), 4594–4613.

Jessop, B. (2008). *State power. A Strategic-relational Approach.* Cambridge: Polity Press.

Jiang, Y., Ritchie, B. W., & Benckendorff, P. (2017). Bibliometric visualisation: An application in tourism crisis and disaster management research. *Current Issues in Tourism,* 1–33.

Kasim, A. (2011). Balancing tourism and religious experience: Understanding devotees' perspectives on Thaipusam in Batu caves, Selangor, Malaysia. *Journal of Hospitality Marketing & Management, 20*(3–4), 441–456.

King, R., & Dinkoksung, S. (2014). Ban pa-Ao, pro-poor tourism and uneven development. *Tourism Geographies, 16*(4), 687–703.

Kleinberg, J. (2003). Bursty and hierarchical structure in streams. *Data Mining and Knowledge Discovery, 7*(4), 373–397.

Knight, D. W. (2018). An institutional analysis of local strategies for enhancing pro-poor tourism outcomes in Cuzco, Peru. *Journal of Sustainable Tourism, 26*(4), 631–648.

Lapeyre, R. (2010). Community-based tourism as a sustainable solution to maximise impacts locally? The tsiseb conservancy case, Namibia. *Development Southern Africa, 27*(5), 757–772.

Li, Y. (2015). Analysis on the paths for the development of the minority culture eco-tourism in Wuling Mountain area. *2nd International Symposium on Engineering Technology.* Education and Management (ISETEM).

Liu, H., Liu, Y., Wang, Y., & Pan, C. (2018). Hot topics and emerging trends in tourism forecasting research: A scientometric review. *Tourism Economics.* https://doi.org/10.1177/1354816618810564.

Manwa, H., & Manwa, F. (2014). Poverty alleviation through pro-poor tourism: The role of Botswana forest reserves. *Sustainability, 6*(9), 5697–5713.

Masele, J. J. (2015). Towards e-commerce use for pro-poor tourism promotion: Local providers' ict training needs in Tanzania. *International Journal of Innovation and Technology Management, 12*(04), 1550020.

Matiza, T., & Oni, O. A. (2014). The perceived economic benefits of tourism: The case of a rural community bordering the Kruger National Park in Limpopo province, South Africa. *Mediterranean Journal of Social Sciences, 5*(20), 322.

Mccain, K. W. (1990). Mapping authors in intellectual space: A technical overview. *Journal of the American Society for Information Science and Technology, 41*(6), 433–443.

Medhekar, A. (2014). Public-private partnerships for inclusive development: Role of private corporate sector in provision of healthcare services. *Procedia - Social and Behavioral Sciences, 157*, 33–44.

Medina-Muñoz, D. R., Medina-Muñoz, R. D., & Gutiérrez-Pérez, F. J. (2016). A sustainable development approach to assessing the engagement of tourism enterprises in poverty alleviation. *Sustainable Development, 24*(4), 220–236.

Mekawy, M. A. (2012). Responsible slum tourism: Egyptian experience. *Annals of Tourism Research, 39*(4), 2092–2113.

Meyer, D. (2009). Pro-poor tourism: Is there actually much rhetoric? And, if so, whose? *Tourism Recreation Research, 34*(2), 197–199.

Mitchell, J. (2012). Value chain approaches to assessing the impact of tourism on low-income households in developing countries. *Journal of Sustainable Tourism, 20*(3), 457–475.

Mitchell, J., & Ashley, C. (2010). *Tourism and poverty reduction: Pathways to prosperity.* London: Earthscan.

Mok, K. Y., Shen, G. Q., & Yang, J. (2015). Stakeholder management studies in mega construction projects: A review and future directions. *International Journal of Project Management, 33*(2), 446–457.

Mowforth, M., & Munt, I. (2015). *Tourism and sustainability: Development, globalisation and new tourism in the third world.* London: Routledge.

Musavengane, R. (2018). Toward pro-poor local economic development in Zimbabwe: The role of pro-poor tourism. *African Journal of Hospitality, Tourism and Leisure, 7*(1), 1–14.

Myles, P. B. (2014). Coastal route tourism: A vehicle for collaborative economic development in the eastern cape, South Africa. *Tourism in Marine Environments, 9*(3–4), 169–179.

Nadkarni, S., & Beesely, L. G. A. (2008). Knowledge creation, retention, exchange, devolution, interpretation and treatment (k-credit) as an economic growth driver in pro-poor tourism. *Current Issues in Tourism, 11*(5), 456–472.

Negi, C. S., & Nautiya1, S. (2003). Indigenous peoples, biological diversity and protected area management—Policy framework towards resolving conflicts. *The International Journal of Sustainable Development & World Ecology, 10*(2), 169–179.

Njoya, E. T., & Seetaram, N. (2018). Tourism contribution to poverty alleviation in Kenya: A dynamic computable general equilibrium analysis. *Journal of Travel Research, 57*(4), 513–524.

Akyeampong, O. A. (2011). Pro-poor tourism: residents' expectations, experiences and perceptions in the kakum national park area of Ghana. *Journal of Sustainable Tourism, 19*(2), 197–213.

Okumus, B., Koseoglu, M. A., & Ma, F. (2018). Food and gastronomy research in tourism and hospitality: A bibliometric analysis. *International Journal of Hospitality Management, 73*, 64–74.

Phommavong, S., & Sörensson, E. (2014). Ethnic tourism in Lao PDR: Gendered divisions of labour in community-based tourism for poverty reduction. *Current Issues in*

Tourism, 17(4), 350–362.

Pillay, M., & Rogerson, C. M. (2013). Agriculture-tourism linkages and pro-poor impacts: The accommodation sector of urban coastal KwaZulu-Natal, South Africa. *Applied Geography, 36*, 49–58.

Pollack, J., & Adler, D. (2015). Emergent trends and passing fads in project management research: A scientometric analysis of changes in the field. *International Journal of Project Management, 33*(1), 236–248.

Poria, Y., Butler, R., & Airey, D. (2003). The core of heritage tourism. *Annals of Tourism Research, 30*(1), 238–254.

Pratt, S., Gibson, D., & Movono, A. (2013). Tribal tourism in Fiji: An application and extension of Smith's 4Hs of indigenous tourism. *Asia Pacific Journal of Tourism Research, 18*(8), 894–912.

Qian, J., Shen, H., & Law, R. (2018). Research in sustainable tourism: A longitudinal study of articles between 2008 and 2017. *Sustainability, 10*(3), 590.

Raza, S. A., & Shah, N. (2017). Tourism growth and income inequality: Does kuznets curve hypothesis exist in top tourist arrival countries. *Asia Pacific Journal of Tourism Research, 2*, 1–11.

Richardson, R. B., Fernandez, A., Tschirley, D., & Tembo, G. (2012). Wildlife conservation in Zambia: Impacts on rural household welfare. *World Development, 40*(5), 1068–1081.

Rogerson, C. M. (2006). Pro-poor local economic development in South Africa: The role of pro-poor tourism. *Local Environment, 11*(1), 37–60.

Rogerson, C. M. (2012). Tourism–agriculture linkages in rural South Africa: Evidence from the accommodation sector. *Journal of Sustainable Tourism, 20*(3), 477–495.

Rogerson, C. M. (2018). *Towards Pro-poor Local Economic Development: The Case for Sectoral Targeting in South Africa. In Local Economic Development in the Changing World.* Routledge.

Rogerson, C. M., & Van der Merwe, C. D. (2016). Heritage tourism in the global south: Development impacts of the cradle of humankind world heritage site, South Africa. *Local Economy, 31*(1–2), 234–248.

Saarinen, J., & Rogerson, C. M. (2014). Tourism and the millennium development goals: perspectives beyond 2015. *Tourism Geographies, 370*(9592), 23–30.

Sahli, M., & Nowak, J. J. (2007). Does inbound tourism benefit developing countries? A trade theoretic approach. *Journal of Travel Research, 45*(4), 426–434.

Salihu, H. (2018). Is Boko haram a "child" of economic circumstances? *International Journal of Social Economics, 45*(8), 1174–1188.

Sanches-Pereira, A., Onguglo, B., Pacine, H., Coelho, S. T., Galindo, M. F. G., & Muwanga, M. K. (2017). Fostering local sustainable development in Tanzania by enhancing linkages between tourism and small-scale agriculture. *Journal of Cleaner Production, 162*, 1567–1581.

Scheyvens, R. (2007). Exploring the tourism-poverty nexus. *Current Issues in Tourism, 10*(2–3), 231–254.

Scheyvens, R. (2009). Pro-poor tourism: Is there value beyond the rhetoric? *Tourism Recreation Research, 34*(2), 191–196.

Scheyvens, R. (2011). *Tourism and Poverty.* London: Routledge.

Scheyvens, R., & Biddulph, R. (2018). Inclusive tourism development. *Tourism Geographies, 20*(4), 589–609.

Scheyvens, R., & Momsen, J. H. (2008). Tourism and poverty reduction: Issues for small island states. *Tourism Geographies, 10*(1), 22–41.

Schianetz, K., Kavanagh, L., & Lockington, D. (2007). The learning tourism destination: The potential of a learning organisation approach for improving the sustainability of tourism destinations. *Tourism Management, 28*(6), 1485–1496.

Sinclair-Maragh, G. (2016). *Climate change and the hospitality and tourism industry in developing countries. In Climate Change and the 2030 Corporate Agenda for Sustainable Development.* Emerald Group Publishing Limited7–24.

Škrbić, I., Jegdić, V., & Milošević, S. (2018). Pro-poor tourism for the purpose of rural environmental development. *Economics of Agriculture, 65*(1), 373–389.

Sloan, P., Simons-Kaufmann, C., Legrand, W., & Perlick, N. (2015). Township tourism in South Africa–a successful tool for poverty alleviation? *Advances in Hospitality and Leisure* (pp. 153–168). Emerald Group Publishing Limited.

Small, H. (1973). Co-citation in the scientific literature: A new measure of the relationship between two documents. *Journal of the American Society for Information Science, 24*(4), 265–269.

Smith, V. L. (1990). Alternative/responsible tourism seminar. *Annals of Tourism Research, 17*(3), 479–480.

Soliman, M. S. (2015). Pro-poor tourism in protected areas–opportunities and challenges: "The case of Fayoum, Egypt". *Anatolia, 26*(1), 61–72.

Spenceley, A., & Meyer, D. (2012). Tourism and poverty reduction: Theory and practice in less economically developed countries. *Journal of Sustainable Tourism, 20*(3), 297–317.

Statista (2017). Statistics and Market Data on Travel, Tourism & Hospitality. Retrieved from: https://www.statista.com/markets/420/travel-tourism-hospitality/.

Synnestvedt, M. B., Chen, C., & Holmes, J. H. (2005). CiteSpace II: Visualization and knowledge discovery in bibliographic databases. *AMIA Annual Symposium Proceedings. Vol. 2005. AMIA Annual Symposium Proceedings* (pp. 724–). American Medical Informatics Association.

The Free Library (2014). *What is Pro-poor Tourism? The Concept of Tourism as a means of Poverty Alleviation has been around for Nearly a Decade, but there is a Continuing Debate over its Effectiveness, Tom Nevin examines the issues raised in two new reports.* Retrieved from: https://www.thefreelibrary.com/What+is+pro-poor+tourism%3f+The +concept+of+tourism+as+a+means+of...-a0171707447.

Theerapappisit, P. (2009). Pro-poor ethnic tourism in the mekong: A study of three approaches in northern Thailand. *Asia Pacific Journal of Tourism Research, 14*(2), 201–221.

Thomas, F. (2014). Addressing the measurement of tourism in terms of poverty reduction: Tourism value chain analysis in lao pdr and Mali. *International Journal of Tourism*

Research, 16(4), 368–376.

Tolkach, D., & King, B. (2015). Strengthening community-based tourism in a new resource-based island nation: Why and how? *Tourism Management, 48*, 386–398.

Torres, R., & Momsen, J. H. (2004). Challenges and potential for linking tourism and agriculture to achieve pro-poor tourism objectives. *Progress in Development Studies, 4*(4), 294–318.

Torres, R. M., Skillicorn, P., & Nelson, V. (2011). Community corporate joint ventures: An alternative model for pro-poor tourism development. *Tourism Planning & Development, 8*(3), 297–316.

Tremblay-Huet, S. (2016). Equitable development through tourism," pro-poor" tourism, and the all-inclusive formula in the Caribbean. *Revue Interventions Economiques-Papers in Polictical Economy, 56.*

Xie, F., Liu, M., & Peng, H. (2017). *Food on the Tree: Green Catering and Poverty Alleviation Tourism.* International Symposium on Green Management and Local Government's Responsibility.

Yalcinkaya, M., & Singh, V. (2015). Patterns and trends in building information modeling (BIM) research: A latent semantic analysis. *Automation in Construction, 59*, 68–80.

Yang, X. T., Kam, H., Liu, J., Xie, L., & Zhao, X. (2014). Poverty alleviation via tourism cooperatives in China: The story of yuhu. *International Journal of Contemporary Hospitality Management, 26*(6), 879–906.

Yu, H. (2017). Research on the economic benefits of pro-poor tourism in Chongqing based on the DEA model. *Revista de la Facultad de Ingeniería, 32*(13).

Zapata, M. J., Hall, C. M., Lindo, P., & Vanderschaeghe, M. (2011). Can community-based tourism contribute to development and poverty alleviation? Lessons from Nicaragua. *Current Issues in Tourism, 14*(8), 725–749.

Zeng, B. (2018). How can social enterprises contribute to sustainable pro-poor tourism development? *Chinese Journal of Population Resources and Environment,* 1–12.

Zhang, Q., Wang, Q., Hao, J. X., & Yu, Y. (2016, June). *Mapping Smart Tourism Research in China: A Semantic and Social Network Analysis using CiteSpace. In Service Systems and Service Management (ICSSSM), 2016 13th International Conference.* IEEE1–5.

Zhao, X. (2017). A scientometric review of global bim research: Analysis and visualization. *Automation in Construction, 80*, 37–47.

Zhou, Z., & Mi, C. (2017). Social responsibility research within the context of megaproject management: Trends, gaps and opportunities. *International Journal of Project Management, 35*(7), 1378–1390.

Zhao, W., & Ritchie, J. B. (2007). Tourism and poverty alleviation: An integrative research framework. *Current Issues in Tourism, 10*(2-3), 119–143.

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